

OUTLINE SHEET 4-11-1

Tag-Out

A. Introduction

The Navy strives to make every activity to be as safe as possible. The knowledge of the tag-out program will help you do your part in keeping yourself and your shipmates safe from unnecessary injuries or death.

B. Enabling Objectives

4.30 **IDENTIFY** the terms associated with the tag out system.

4.31 **STATE** the procedures for performing a tag out.

4.32 **PERFORM** a simulated tag out in accordance with OPNAVINST. 3120

C. Topic Outline

1. Introduction
2. Overview
3. Levels of Responsibility
4. Terminology
5. Tag-out Procedure
6. Audits
7. Summary and Review
8. Assignment

ASSIGNMENT SHEET 4-11-2

Tag-Out

A. Introduction

This material is to be completed prior to the material being covered in class.

B. Enabling Objectives

Refer to enabling objectives in Outline Sheet 4-11-1.

C. Study Assignment

1. Read Fireman NAVEDTRA 12001, pages 1-10 to 1-12.
2. Read Information Sheet 4-11-3

D. Study Questions

1. What is the difference between an orange label and a red tag?
2. What are the sections of the tag-out log?
3. Must the "second person" signing block 12 be the same person to initial "checked by" block 22.

INFORMATION SHEET 4-11-3

Tag-out

A. Introduction

This information describes the Tag-out Program.

B. Reference

OPNAVINST 3120.32C Equipment Tag-Out Bill
Machinist's Mate 3&2 NAVEDTRA 12144
Fireman NAVEDTRA 12001

C. Information

- I. Before the existence of the Tag-out program, a staggering number of personnel suffered injuries or death, and untold millions of dollars were lost in equipment damage as the direct result of improper operation or isolation of equipment.
- II. To minimize, if not eliminate these mostly preventable accidents, the Navy created a tag-out procedure that is mandatory and therefore, the standard for all ships.
- III. Purpose of the Tag-out bill.
 - A. It provides a procedure to prevent improper operation when a component, equipment, system, or portion of a system is isolated or in an abnormal condition.
 - B. It provides a procedure to be used when an instrument is unreliable or is not in a normal operating condition.
- IV. Levels of responsibility for the Tag-out bill
 - A. The **Commanding Officer** is overall responsible for the safety of his/her entire command and must ensure compliance with the tag-out bill.
 - B. **Department Heads** are responsible for ensuring that personnel assigned to their department understand and comply with the procedures of the bill.
 - C. **Repair activity** is responsible for ensuring the safety of repair personnel and must comply with the ship's tag-out program.
- V. Definition of terms
 - A. **AUTHORIZING OFFICER** - the person with the authority to sign tags or labels to be issued or cleared.
 1. Authorizing Officers are designated by billet or watchstation by the Commanding Officer.
 - a) Billet - job or appointment (Chief Engineer, MPA).
 - b) Watchstation - place of watch (EOOW, EDO)
 2. He or she is also responsible for ensuring that the persons assigned to perform tag-outs are qualified.
 - B. **REPAIR ACTIVITY** - any activity other than ship's force that is involved in the construction or maintenance of the ship.

- C. **REPAIR ACTIVITY REPRESENTATIVE** - the shop supervisor (or equivalent) of the repair activity.
 - D. **SHIP'S FORCE** - personnel assigned to the ship who are responsible for the maintenance and operation of the ship's systems and equipment.
- VI. In the Tag-out program, tags or labels are used to indicate that the tagged equipment must not be operated or removed, or that specific instructions must be followed for its operation.
 - A. **CAUTION TAG** - a yellow tag which provides temporary special instructions or indicates that unusual action must be exercised to operate the equipment.
 - 1. The instruction on the tag must state the specific reason why the tag is installed. Phrases such as "DO NOT OPERATE WITHOUT EOOW PERMISSION" are not appropriate.
 - 2. A CAUTION tag is not used if personnel or equipment can be endangered. (A DANGER tag is used in this case).
 - B. **DANGER TAG** - red tags that prohibit operation of equipment that could endanger personnel or equipment. Equipment with a red danger tag shall not be operated or removed.
 - C. **OUT OF CALIBRATION LABELS** - orange labels used to identify instruments that are out of calibration and will not indicate accurate readings.
 - 1. An instrument with this label may be used only with extreme caution.
 - D. **OUT OF COMMISSION LABELS** - red labels used to identify instruments that will not read correctly because they are defective or isolated from the system.
 - 1. An instrument with this label can not be relied on and must first be repaired and recalibrated or reconnected to the system.
- VII. Tag-out Logs and Records
 - A. The **TAG-OUT LOG** is the control document used to administer the entire tag out procedure. It is the record of authorization of each effective tag-out action. The log contains five sections:
 - 1. Section One - **The instruction section** contains a copy of OPNAVINST 3120.32C, the Navy's Tag-out instruction, and other amplifying directives.
 - a) This section also contains the list of Authorizing Officers.
 - 2. Section Two - The DANGER/CAUTION Tag-out **index and record of audits** is a sequentially numbered list of all tag-outs issued.
 - a) It is also used by the Authorizing Officer to record the results of Tag-out program audits.
 - 3. Section Three - all **active** DANGER/CAUTION Tag-out

Record Sheets are kept in this section of the log.

- a) **TAG-OUT RECORD SHEETS** are the forms used to list all the tags associated with the tag-out of a specific system or component.
- b) The Record Sheet is also used to record discrepancies (including corrective actions) found during audit(s) of the particular tag-out action.
4. Section Four - the **Instrument log** is a sequential listing of all the labels issued for out-of-commission and out-of-calibration instruments.
5. Section Five - all **Cleared DANGER/CAUTION** Tag-out Record Sheets are filed in this section until they are reviewed by the Department Head.

VIII. **PREPARING A TAG-OUT.** Permission must be obtained from the Authorizing Officer before tagging out an equipment or system.

- A. **Determine the number of tags required** by identifying all the isolation points for the tag-out action.
 1. Isolation points may be determined from approved systems diagrams and circuit schematics.
 2. Enough tags shall be used to completely isolate the section of piping or circuit being worked on or to prevent the operation of the system or component from all stations that could exercise control.
- B. **Obtain a serial number** from Section 2 (Index and Record of Audits) of the Tag-out Log.
 1. Take the next available number in the sequence. Example: If the number for the last entry is E - 1275, the next available number is E - 1276.
 2. Write this number in the LOG SERIAL column of the index. Fill out the DATE ISSUED, TYPE, and DESCRIPTION columns. Leave the DATE CLEARED column blank.
 - a) It is very important that the index be filled out properly to prevent the use of the same serial number for another tag-out action.
- C. **Prepare Record Sheet.** Fill out the Record Sheet as follows:
 1. **DANGER/CAUTION TAG-OUT RECORD SHEET** Title block (Top left corner, front page)
 - a) Circle either danger or caution, depending on the type of tag-out needed. Draw a single line through the other.
 2. **DATE/TIME TAG-OUT ISSUED (Block 1)**
 - a) Write the same date as the one entered in the Tag-out Log index.
 - b) Time is when entry was made in the Tag-out Log index.
 3. **SYSTEM OR COMPONENT (Block 2)**

- a) Write the name of the system or component to be isolated.
4. LOG SERIAL NO. (Block 3)
 - a) Write the number obtained from the Tag-out Log index.
5. REASON FOR TAG-OUT (Block 4)
 - a) Write the reason why the system or component is being isolated and tagged-out.
 - (1) Example: To remove pump for overhaul by Ship Repair Facility.
6. PERSONNEL/EQUIPMENT HAZARDS INVOLVED (MANDATORY FOR DANGER TAGS) (Block 5)
 - a) State all personnel and equipment hazards involved while working on the equipment.
 - (1) Examples: Electric shock, steam burns, rotating equipment, flooding, fire, bearing/gear damage, etc.
 - b) Use danger tags if any personnel or equipment hazard is involved.
7. AMPLIFYING INSTRUCTIONS (MANDATORY FOR CAUTION TAGS) (Block 6)
 - a) May be left blank for danger tags.
 - b) For caution tags, state the specific instruction incidental to the operation of the equipment.
 - (1) Example: Ensure MF-13 is shut before operating this equipment.
 - (2) Phrases such as "Notify EOOW before operating this equipment" are not allowed.
8. WORK NECESSARY TO CLEAR TAGS (Block 7)
 - a) State the work that must be completed before the tags can be removed.
 - (1) Example: Complete repair of pump discharge piping.
9. APPLICABLE DOCUMENTATION (Block 8)
 - a) Write the document numbers of technical manuals, instructions, work requests, MRCs, etc. that will be used to complete the work.
10. TAG NUMBERS USED (Block 9)
 - a) Example: If 15 tags are required to isolate the equipment, write 1-15 (meaning tag numbers 1 through 15 are used for this tag-out).
11. DATE/TIME ISSUED OR ADDED (Block 10)
 - a) Write the date and time as entered in Block 1.
 - b) When adding tags, write in the next row the date and time the additional tags were issued.
12. **Skip to the reverse side of the Record Sheet.**

13. **Block Nos. 18,19, and 20 will be filled out per tag.**
14. TAG NO. (Block 18)
 - a) Tags are numbered sequentially starting from the number 1.
 - b) When adding tags at a later time (or date), continue the sequence from the last number of the original issue.
15. LOCATION (Block 19) (Refer to the diagram that was used to identify the isolation points)
 - a) Write the identification number (valve number, breaker number) or name of the isolation point.
16. TAGGED POSITION/CONDITION (Block 20)
 - a) Write the position or condition of the isolation point.
 - (1) Examples:
 - (a) SHUT or in some instances, OPEN for valves.
 - (b) OFF for switches and breakers
 - (c) REMOVED for fuses
 - (d) INSTALLED for blank flanges.
17. Repeat steps 14 through 16 until all isolation points have been recorded.
- D. **Prepare the tags.** (Danger and Caution tags are filled out similarly except for the special instruction at the back of the Caution tag.)
 1. SYSTEM/COMPONENT IDENTIFICATION
 - a) Write the identification number or name of the isolation point where this particular tag will be attached. (Same information from Block 19 - LOCATION, of the Record Sheet).
 2. POSITION OR CONDITION OF ITEM TAGGED
 - a) Write the same position or condition as stated in Block 20 of the Record Sheet.
 3. DATE/TIME
 - a) Write the same date as in Block 9 of the Record Sheet.
 - b) Fill out the time when the tag is attached.
 4. SERIAL NO.
 - a) This number is the same serial number obtained from the index and recorded in Block 3 of the Record Sheet.
 - b) This number will be the same for all tags listed in the Record Sheet.
 - c) Write the number on the tag in such a way that it becomes a continuation of the words "SERIAL NO."
 5. Number each tag corresponding to its number on the Record

Sheet. Write the tag number after a dash following the serial number.

6. Fill out a tag for each isolation point listed in Record Sheet.
- E. Present the Record Sheet and tags to the Petty Officer in Charge of the Work for his/her review.
 1. When satisfied with the correctness of the tag-out, he or she will sign in Block 11 of the Record Sheet.
 2. If you are assigned as the Petty Officer in Charge of the Work, sign Block 11 of the Record Sheet.
- F. Present the Record Sheet and tags to a second person qualified in tag-out procedures.
 1. This second person will conduct an independent review of the tag-out to ensure correctness and completeness.
 2. When satisfied with the tag-out, he or she will sign in Block 12 of the Record Sheet.
- G. Present the Record Sheet and tags to the Authorizing Officer for review and authorization.
 1. If the work involves a Repair Activity, a repair activity representative will review and sign the Record Sheet before the Authorizing Officer does.
 2. When satisfied with the adequacy and accuracy of the tag-out, he or she will:
 - a) sign Block 13 of the Record Sheet
 - b) sign all the tags in the SIGNATURE OF AUTHORIZING OFFICER block.
- H. **THE TAGS ARE NOW AUTHORIZED FOR INSTALLATION.**
- IX. **INSTALLATION OF TAGS**
 - A. **Attach tags.** Only qualified ship's force personnel shall position equipment and affix tags or labels.
 1. Ensure the item being tagged is in the prescribed position/condition.
 2. Attach the tag such that it is apparent to anyone who may attempt to operate the equipment.
 - a) Do NOT attach tags to breaker covers or valve caps which may be subsequently removed.
 3. Sign tag in the SIGNATURE OF PERSON ATTACHING TAG block.
 4. Indicate present time in the tag's DATE/TIME block.
 5. Initial block 21 (POSTED BY) of the Record Sheet for the corresponding tag number.
 6. Repeat steps until all tags are attached.
 - B. **Verify attachment of tags.** A second person will independently verify proper positioning of equipment and attachment of tags. (If Repair Activity is involved, a repair activity representative should witness the verification and sign the tags.)
NOTE: Only qualified ship's force personnel shall perform the

second check of tag installation. **The second person shall not accompany the person initially installing the tag(s).**

1. Verify proper position/condition of tagged item.
 2. Sign tag in the SIGNATURE OF PERSON CHECKING TAG block.
 3. Initial block 22 (POSTING CHECKED BY) of the Record Sheet for the corresponding tag number.
 4. Repeat steps until all tags are verified.
- C. Installation of tags is now complete. Place Record Sheet in Section 3 (ACTIVE RECORD SHEETS) of the Tag-out Log.
- X. INSTALLATION OF LABELS
- A. Determine condition of instrument whether it is out-of-commission or out-of-calibration..
 - B. Make entry into the instrument log. Entries are numbered sequentially. The number of the entry is the serial number to be used on the label.
 - C. Fill out the required label.
 - D. Obtain authorization from the Authorizing Officer. He or she will sign the label and the Instrument Log entry.
 - E. Attach label.
 - F. Sign label and the Instrument Log entry.
- XI. CONDUCTING A TAG-OUT AUDIT. Enforcement of the Tag-out bill is accomplished by conducting periodic audits of the Tag-out log.
- A. Visually check all outstanding tags on each Record Sheet to ensure that they are still attached and the tagged items are still in their prescribed position.
 1. NO operation of a valve or switch is authorized as a part of a routine tag-out audit.
 2. When actual position of a DANGER-tagged valve is in doubt, the OOD or EOOW may authorize two persons to independently check the position of the valve.
 - a) Check the position of the valve by turning the valve handwheel a small amount in the SHUT direction only.
 - B. Report any discrepancies promptly to the Authorizing Officer.
 - C. Record date of audit and discrepancies and corrective actions (if any) under the last entry on the reverse side of the Record Sheet. Sign after the audit entry.
- XII. REMOVAL OR CLEARANCE OF DANGER AND CAUTION TAGS
- A. Have Work Center Supervisor or POIC sign in block 15 of the Record Sheet. The repair activity representative (if involved) will sign in block 16 and each item to be cleared in block 24b of the Record Sheet.
 - B. Obtain authorization from the Authorizing Officer to clear tags.

1. The Authorizing Officer will annotate the desired position or condition of the tagged item in block 23 (CLEARANCE POSITION/CONDITION) of the Record Sheet.
2. The Authorizing Officer will sign for each item in block 24a of the Record Sheet.
- C. Remove all tags authorized for removal. (Do not leave strings on the equipment.)
 1. Fill out blocks 25 and 26 of the Record Sheet as each tag is removed.
 2. Place equipment in position or condition as prescribed in block 23 of the Record Sheet. **Do not operate equipment if there are other tags attached from other tag-out actions.**
- D. Deliver Record Sheet and all tags to the Authorizing Officer.
 1. The Authorizing Officer will conduct an inventory of the tags.
 2. When satisfied that the correct tags were removed, he or she will destroy the tags.
 3. He or she will then complete blocks 27 and 28 of the record sheet (if the tag-out is completely cleared).
- E. Place the "cleared" Record Sheet in Section 5 of the Tag-out log.
- F. Complete the DATE CLEARED column of the Tag-out Log Index.
- G. **NOTE:** If there are any remaining (uncleared) tags in the tag-out, the tag-out is still considered active and the Record Sheet must be returned to Section 3 of the Tag-out Log. In this case do not complete the DATE CLEARED column of the Tag-out Log Index.

DIAGRAM SHEET 4-11-4

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OPNAV 3120/4 (Rev 4-88)

S/N 0107-LF-301-2040

Danger/Caution Tag-Out Record Sheet (Front)

DANGER/CAUTION TAG-OUT RECORD SHEET				1. DATE/TIME TAG-OUT ISSUED		
2. SYSTEM OR COMPONENT			3. LOG SERIAL NO.			
4. REASON FOR TAG-OUT						
5. PERSONNEL/EQUIPMENT HAZARDS INVOLVED (MANDATORY FOR DANGER TAGS)						
6. AMPLIFYING INSTRUCTIONS (MANDATORY FOR CAUTION TAGS)						
7. WORK NECESSARY TO CLEAR TAG(S) (INCLUDING TESTS)						
OPERATIONS/WORK ITEMS INCLUDED IN TAG-OUT						
8. APPLICABLE DOCUMENTATION (I.E., JOB ORDER, RIP-OUT, S/P, ETC) NUMBER AND TITLE	9. TAG NUMBERS USED	10. DATE/TIME ISSUED OR ADDED	11. PETTY OFFICER IN CHARGE	13. AUTHORIZING OFFICER	WORK COMPLETE	
			12. SECOND PERSON (SIGNATURE)	14. REPAIR ACTIVITY REP (WHEN APPROP)	15. WCS/POIC 16. REPAIR ACTIVITY REP (WHEN APPROP)	17. DATE

☐ CHECK BOX IF CONTINUED ON
ADDITIONAL SHEET


Danger/Caution Tag-Out Record Sheet (Back)

18. TAG NO.	19. LOCATION	20. TAGGED POSITION/ CONDITION	21. POSTED BY (INITIAL)	22. POSTING CHECKED BY (INITIAL)	23. CLEARANCE POSITION/ CONDITION	24. CLEARANCE AUTHORIZED (SIGNATURE)		25. DATE/ TIME CLEARED	26. CLEARED BY (INITIAL)
						a. AUTHORIZING OFFICER	b. REPAIR ACTIVITY		
27. SIGNATURE OF WATCH OFFICER/DUTY OFFICER					28. DATE/TIME		CONTINUED ON ADDITIONAL SHEET (CHECK IF APPLICABLE)		

Danger Tag (Red Tag)

 SERIAL NO.	SYSTEM/COMPONENT/IDENTIFICATION	DATE/TIME
	POSITION OR CONDITION OF ITEM TAGGED	
	<h1 style="margin: 0;">DANGER</h1> <h2 style="margin: 0;">DO NOT OPERATE</h2>	
	SIGNATURE OF PERSON ATTACHING TAG	SIGNATURE OF PERSON CHECKING TAG
	SIGNATURE OF AUTHORIZING OFFICER	SIGNATURE OF REPAIR ACTIVITY REPRESENTATIVE
NAVSHIPS 9890/8 (REV.3-70) (FRONT)		

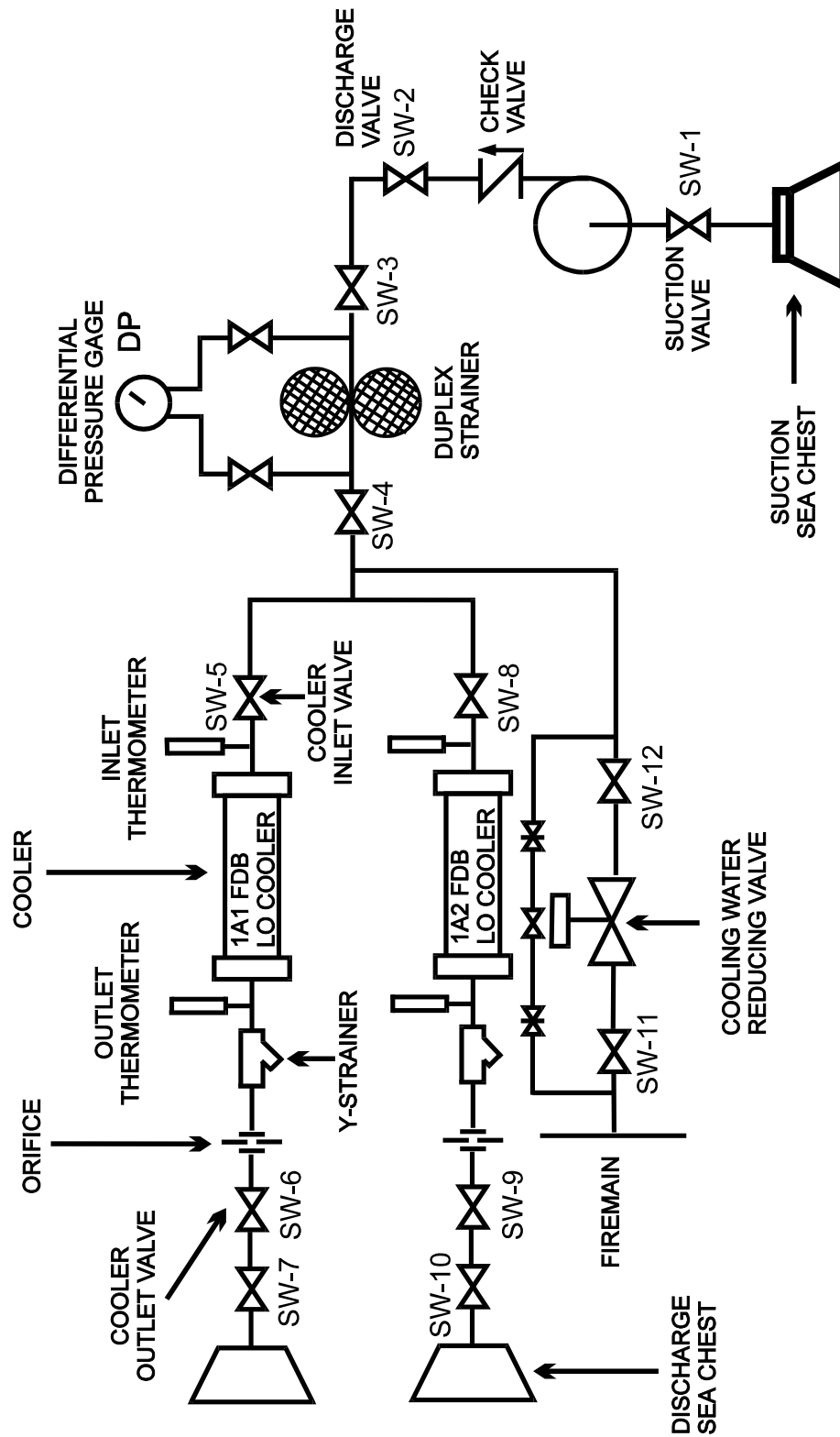
FRONT

	<h1 style="margin: 0;">DANGER</h1> <h2 style="margin: 0;">DO NOT OPERATE</h2> <p style="margin: 0;">OPERATION OF THIS EQUIPMENT WILL ENDANGER PERSONNEL OR HARM THE EQUIPMENT. THIS EQUIPMENT SHALL NOT BE OPERATED UNTIL THIS TAG HAS BEEN REMOVED BY AN AUTHORIZED PERSON</p>
	NAVSHIPS 9890/8 (REV.3-70) (FRONT)

BACK

DIAGRAM SHEET 4-11-7

AMCW System



JOB SHEET 4-11-8

Tag-Out

I. Introduction

- A. This job sheet will be used to prepare a safety tag-out of a component, given the materials listed below.

II. Materials. The following materials are required:

- A. Tag-out Log
- B. DANGER/CAUTION TAG-OUT RECORD SHEET
- C. Danger Tags
- D. Diagram Sheet 4-11-7 (AMCW System)

III. References:

- A. OPNAVINST 3120.32C

IV. Safety Precautions:

- A. None

V. Job Steps:

- A. Prepare a safety tag-out for one of the components in Diagram Sheet 4-11-7 (as specified by instructor) using the procedures learned in Lesson Topic 4-11.
- B. Turn in tags and tag-out record sheet to the instructor when ready for second person signature.